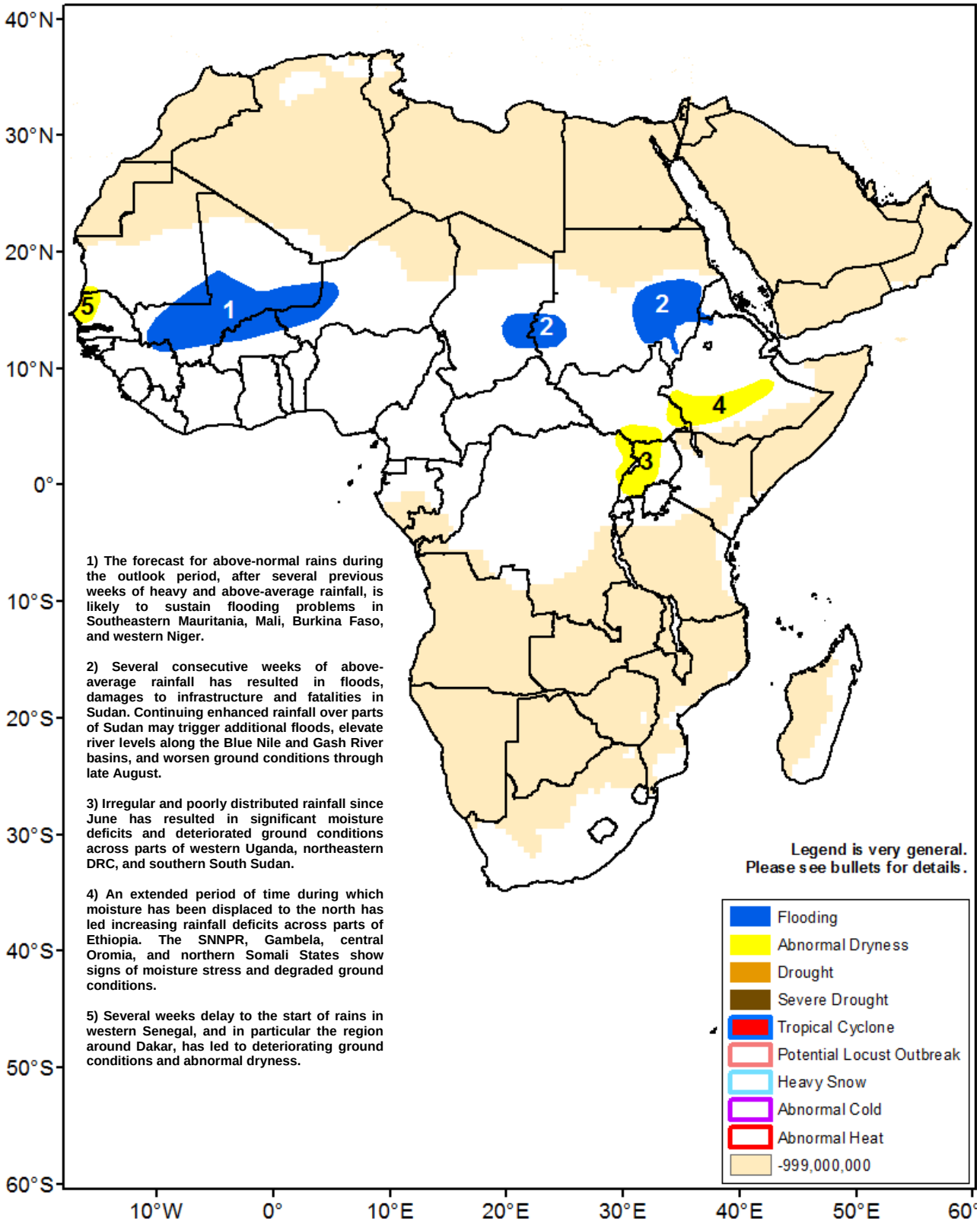
Climate Prediction Center's Africa Hazards Outlook
August 23 – August 29, 2018

- **Very heavy rains have continued across the Sahel for yet another week.**
- **After continuing poor rainfall performance abnormal dryness is expanding in Ethiopia and South Sudan.**



1) The forecast for above-normal rains during the outlook period, after several previous weeks of heavy and above-average rainfall, is likely to sustain flooding problems in Southeastern Mauritania, Mali, Burkina Faso, and western Niger.

2) Several consecutive weeks of above-average rainfall has resulted in floods, damages to infrastructure and fatalities in Sudan. Continuing enhanced rainfall over parts of Sudan may trigger additional floods, elevate river levels along the Blue Nile and Gash River basins, and worsen ground conditions through late August.

3) Irregular and poorly distributed rainfall since June has resulted in significant moisture deficits and deteriorated ground conditions across parts of western Uganda, northeastern DRC, and southern South Sudan.

4) An extended period of time during which moisture has been displaced to the north has led increasing rainfall deficits across parts of Ethiopia. The SNNPR, Gambela, central Oromia, and northern Somali States show signs of moisture stress and degraded ground conditions.

5) Several weeks delay to the start of rains in western Senegal, and in particular the region around Dakar, has led to deteriorating ground conditions and abnormal dryness.

Seasonal deficits are most significant in western Senegal

During the third week of August, heavy rainfall accumulations (>100mm) were received throughout several West African nations including Guinea, Sierra Leone, Liberia, Mauritania, and Mali. Moisture continued to surge far northward into desert areas of northern Mali, Niger, Mauritania, and Algeria (**Figure 1**). Flooding reports continue to come out of Niger. Some increase in rainfall was observed in western Senegal, though some areas, including Dakar and northern regions of the country were left out. Along the Gulf of Guinea, southern portions Cote D'Ivoire, and Ghana received only light and scattered rainfall.

As of mid-August, the performance of the West Africa monsoon continues to be favorable, with much of the domain experiencing average to above-average precipitation over both short and long-term timescales. Since the beginning of June, the highest moisture surpluses remain along the Sahel, where portions of southern Mauritania, Mali, Niger, and Chad have received more than twice their normal rainfall accumulation (**Figure 2**). Towards the south, positive seasonal anomalies remain more moderate and are trending negative in Cote D'Ivoire, and Ghana. Parts of northeastern Nigeria and western Senegal depict drier than average conditions. Despite local parts of western Senegal receiving more normal rains this week, 30-day deficits increased for many areas. The Dakar region has registered little to no rainfall since the beginning of July according to satellite estimated rainfall and rain gauge measurements. This rainfall pattern is leading to degradation of vegetation health for these areas.

During the outlook period, precipitation models suggest another week of average to above-average rainfall throughout much of West Africa. The highest weekly accumulations (>100mm) are forecast for the far western countries and along the Sahel. There is potential for more normal rainfall totals over western Senegal, as well as along the Gulf of Guinea coast.

Satellite Estimated Total Rainfall (mm)
Valid: Aug 15 – August 21, 2018

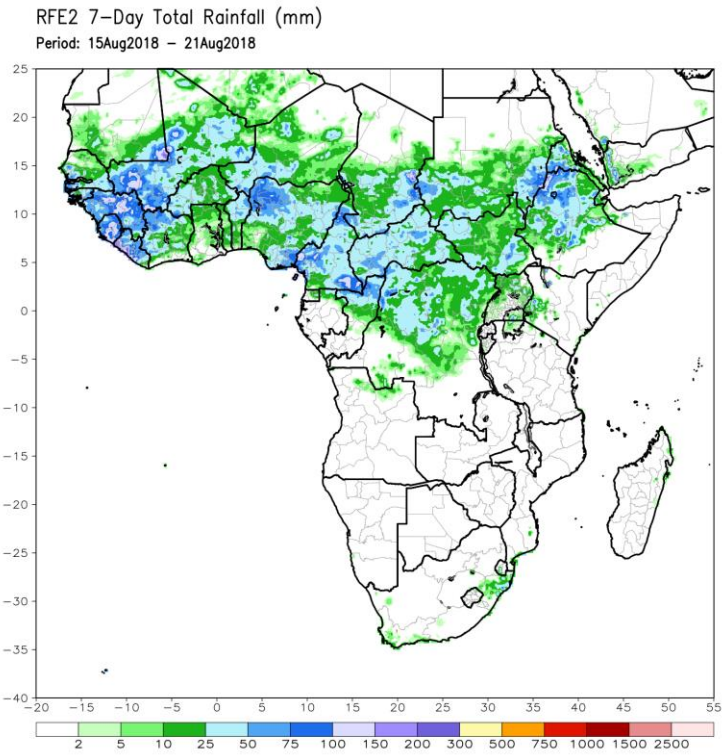


Figure 1: NOAA/CPC

Large 30-day rainfall deficits are expansive across Ethiopia

Northern Ethiopia and neighboring portions of Sudan and Eritrea experienced another week of heavy rain. According to satellite rainfall estimates, the highest totals were greater than 150mm (**Figure 1**). The continuation of moderate to heavy rainfall over saturated areas means the risk for floods and other adverse ground impacts in the region remains high. While areas of moderate rain were more extensive this week, 7-day totals were 10-50mm below normal in many parts of central Ethiopia.

Portions of Sudan, South Sudan and northern Ethiopia continue to experience above-average seasonal rainfall, but there are many other areas that have experienced a rapid strengthening of anomalous dryness during the past several weeks. 30-day moisture deficits exceed 100mm over many local areas of western and central Ethiopia. Parts of the SNNP, Gambela, and Oromia regions, as well as the Afar region and neighboring eastern Eritrea have received less than half of their normal rainfall since the beginning of July (**Figure 2**). In parts of western Uganda, northeastern DRC and southern South Sudan, significant moisture deficits and poor ground conditions are evident according to remote sensing products. The continuation of suppressed rainfall is expected to adversely impact ongoing cropping activities.

Precipitation models suggest the potential for above-average rainfall during the next week in western Sudan, South Sudan, and Uganda. Near-average rain is expected elsewhere, possibly providing a reprieve to saturated portions of eastern Sudan.

Satellite Estimated Percent of Normal Rainfall (%)
Valid: June 1 – August 21, 2018

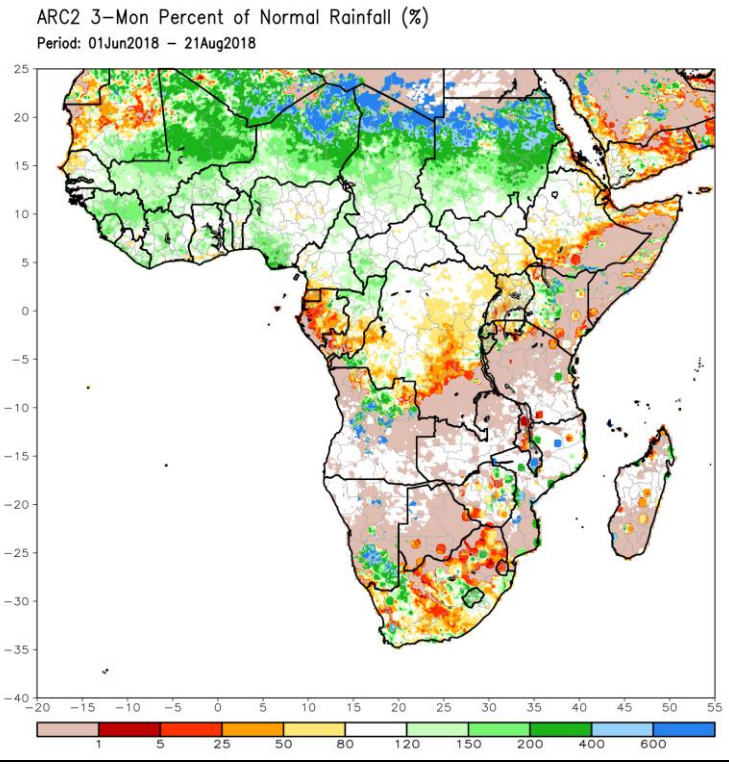


Figure 2: NOAA/CPC

Note: The hazards outlook map on page 1 is based on current weather/climate information and short and medium range weather forecasts (up to 1 week). It assesses their potential impact on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed. The boundaries of these polygons are only approximate at this continental scale. This product does not reflect long range seasonal climate forecasts or indicate current or projected food security conditions.

Questions or comments about this product may be directed to Wassila.Thiaw@noaa.gov or 1-301-683-3424.